Indians Call Sterile Mosquitoes CIA Agents

By Lewis M. Simons
Washington Post Foreign Service

NEW DELHI—A U.N. program of sterilizing millions of mosquitoes in order to breed them and the diseases they carry out of existence is being jeopardized by politicians who claim that it is a cover for American germ-warfare experiments.

Reacting to political pressure, the Indian Council of Medical Research, which works with the World Health Organization, has decided that the project—the largest of its kind in the world—cannot go on unless it comes under complete Indian control.

WHO officials are disturbed by the Indian decision, fearing that Indian control of the program will interfere with "scientific objectivity" and that politically imposed restrictions and precautions will hinder advances.

"It would be a terrible shame if this program is damaged or even destroyed because a handful of politicians see the CIA under every rock," said one WHO source.

But even concerned WHO officials concede that they can understand why the program has raised fears of U.S. subterfuge. This is the way the program might look to one of the skeptical members of Parliament who have demanded its takeover:

• Under the direction of an American scientists, a small laboratory on New Delhi's busy Ring Road is breeding and sterilizing millions of male mosquitoes to be released in carefully selected Indian towns and villages.

• The mosquitoes, of the **AIDES AEGYPTI** strain, are th etype that carry yellow fever in Central America and Africa. Yellow fever is unknown in India.

• Some of the mosquitoes are sterilized with a chemical known as thiotepa, a modification of poisonous mustard gas, which is capable of producing cancer in humans.

• While malaria is rapidly reassuming epidemic proportios in India, this project is focusing on a strain of mosquitoes that carries *filariasis*, a completely different disease.

• The project is financed mainly by the United States government, which has spent nearly $2 million in American-held Indian rupees on it in the last five years. (WHO and the Indian medical council share in the funding.)

Any member of Parliament already predisposed against U.S. involvement in India would find ample support for his fears and prejudices in an extraordinary series of articles in the National Herald, the daily newspaper of Prime Minister Indira Gandhi's ruling Congress Party.

The lengthy, three-part series quoted extensively from a report by Sweden's Stockholm International Peace Research Institute. According to the report, the U.S. Biological Warfare Center at Fort Detrick, Md., has taken "the greatest biological warfare interest in a yellow fever virus . . ."

The National Herald articles have appeared under the byline of "A Research Worker." According to a WHO sources, the writer is an ambitious Indian government scientist who is personally interested in heading the program.

Under new controls to take effect when the current five-year agreement terminates in June, the head of the Indian Council of Medical Research, Dr. Coluthur Gopalan, will take complete administrative and technical charge of the program.

Gopalan, an expert in nutrition research, terms the controversy over the program "unfortunate." As a scientist, he said in an interview, "I have no reservations. But any country would demand safeguards on a project like this. Other countries wouldn't have waited five years, either."

One of the "safeguards" to be imposed will requre the project leader, who currently happens to be an American scientist, to report directly to the Indian Medical Council rather than to WHO, his employer.

This requirement springs from the fear among certain members of Parliament that WHO is making secret information available to the United States for use in biological warefare installations.

The Indian Medical Council will stiffen controls over the millions of sterilized male mosquitoes, released to breed with normal females, to make sure that they do not simply become more efficient carriers of yellow fever—if yellow fever is ever introduced into India.

Th Indian Council also plans to set up a "monitoring body" of Indian scientists to assess independently claims and results of the program, "to insure scientific objectivity."

The e two specific controls, WHO officials say, will slow the project down appreciable. According to one source, nearly a year has already been lost as a result of the controversy.

"Yellow fever evokes great fear," said the source, "and this fear has been used as a tool. This has brought about the additional safeguards, which Indian scientists know as well as we do are totally unnecessary, and vital time is lost."

Dr. Gerald D. Brooks, the project leader at the jointly sponsored Research Unit on Genetic Control of Mosquitoes, stresses that he and his staff already exercise the ut-

most precaution.

"Why, every six months a team of top international specialists comes to Delhi to review the project, its progress and our current objectives," Brooks said. "There's no good reason for adding Indian controls on top of this."

Brooks, from Bakersfield, Calif., refused to discuss the political implications of his work, limiting his comments to purely scientific aspects. But he noted, while taking a visitor on a tour of the laboratories, that after the mosquitoes are sterilized with thiotepa, they are thoroughly washer, and that dosages os the chemical were far below those that could cause cancer or have other harmful effects in humans.

Brooks also stressed that besides chemicals, radiation is also used to sterilize the male mosquitoes. In another, completely different method, potent males of one strain of mosquitoes are released to breed with females of another strain, but because the two breeds are incompatible, they produce no offspring.

Radiation and chemicals are also used to alter mosquitoes' normal chromosome arrangements, producing far more males than females. Since only female mosquitoes bite—and thereby transmit diseases—release of these strains cuts into the spread of disease.

"Our objective is to test several systems," Brooks said, adding that the New Delhi project is the largest concerted effort in the world to test genetic-control techniques.

The laboratories are full of equipment that Brooks and his staff—all but one of them Indians—have devised and built. One machine looks like a big pinwheel mounted on a tricycle, is used to distribute sterilized mosquitoes evenly in narrow village lanes.

The laboratory is hot and humid to foster the growth of millions of insects as they breed, lay eggs, feed on chicken blood or a dog-biscuit-and-yeast mixture and are sterilized before being transported to the field. The lab raises 3 million mosquitoes a week.

When the project began in 1970, Malaria, India's major mosquito-borne killer, was almost completely controlled. A massive DDT program funded largely by the United States had all but eradicated it.

As a result, there was nothing unusual about a mosquito project that ignored malaria and concentrated instead on filariasis, also known as elephantiasis. About 8 million Indians and 200 million people throughout the world are believed to have this disease, which results in horrible swelling of limbs.

Since then, however, mosquitoes in India have grown increasingly resistant to DDT, the chemical itself has become prohibitively expensive and scarce, and malaria is recurring in epidemic proportions around the country.

This factor has also contributed to criticism of the New Delhi project, which in practical terms now appears less relevant than it used to.

Meanwhile, Indian takeover of the project may diminish U.S. willingness to continue funding it.

Sources emphasize that no decision has been reached yet, but one cautioned, "Once you've signed up to pay your money to one fellow, you want to have a hard look before you start paying someone else."

Male mosquitos swarm to the top of the separator while females are trapped, unable to force their way through the grid.

By Lewis M. Simons—The Washington Post